

CLAIMS

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1. Antenna configuration (1) for a telecommunication device (TCD) wherein the antenna configuration (1) comprising a first resonator structure (6) and a second resonator structure (RS) and a control electrode (2) said two resonator structures (6, RS) are capacitive coupled to one another and said control electrode (2) being provided and realized for changing the capacitive coupling between the first resonator structure (6) and the second resonator structure (RS) and wherein the control electrode (2) being contactable from outside the antenna configuration (1) and wherein a switching means (3) being associated with the control electrode (2), by means of the switching means (3) the control electrode (2) being connectable to a reference potential (G).

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2. Antenna configuration (1) according to claim 1, wherein the switching means (3) being part of the antenna configuration (1) and/or being an external unit with regard to the antenna configuration (1).

3. Antenna configuration (1) according to claim 1, wherein the switching means (3) being designed to connect the control electrode (2) to ground (G).

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4. Antenna configuration (1) according to claim 1, wherein the antenna configuration (1) being realized by means of a planar inverted F antenna or a shorted patch antenna or a stub antenna.

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5. Antenna configuration (1) according to claim 1, wherein the antenna configuration (1) comprising a dielectric substrate (5) retaining the first resonator structure (6) and the second resonator structure (RS), the first resonator structure (6) being connected to a feed line (8) provided on the dielectric substrate (5), and the second resonator structure (RS), by means of the dielectric substrate (5) being electrically isolated from the first resonator structure (6) and being located adjacent to the first resonator structure (6),

being connected to ground (G).

6. Antenna configuration (1) according to claim 5, wherein
the first resonator structure (6) and the second resonator structure (RS) are realized by printed
5 structures printed on a surface of the dielectric substrate (5).

7. Antenna configuration (1) according to claim 5, wherein
the first resonator structure (6) and the second resonator structure (RS) are at least partially
located in the interior of the dielectric substrate (5).

8. Antenna configuration (1) according to claim 7, wherein
the antenna configuration (1) being manufactured by usage of low temperature cofired
ceramic technology.

9. Antenna configuration (1) according to claim 1, wherein
the switching means (3) comprises a PIN diode or a semiconductor switch.

10. Antenna configuration (1) according to claim 1, wherein
the switching means (3) comprises a variable capacitance diode.

11. Telecommunication device (TCD), comprising an antenna configuration (1)
according to at least one of the claims 1 through 10.

12. Method of operating a telecommunication device comprising an antenna
25 configuration (1) according to at least one of the claims 1 to 10, wherein
the antenna configuration (1) comprises a control electrode (2) said control electrode (2) is
contacted from outside the antenna configuration (1) and
for changing the resonance frequency of the antenna configuration (1) contacting of the
control electrode (2) from outside is done by switchably connecting the control electrode (2)
30 to a reference potential (G).

13. Method according to claim 12, wherein
the resonance frequency is changed between a first frequency band and a second frequency
band.

14. Method according to claim 13, wherein the resonance frequency is changed between the DCS band and the UMTS band.

- 5 15. Method according to claim 12, wherein the resonance frequency is changed within a given frequency band between a first sub-band and a second sub-band.